A Test of Three Different Developers Using AVIPHOT-200 PAN Film

With any film it is wise to first make a test of how any developer shall react to have the best quality of negative of which to make a print from. (*If you begin with crap, you get CRAP)*. So as it is with **AVIPHOT-200 PAN** film, of which I have not used very much. I wanted to see what would be the best developer to use with this film.

For my testing of this film, I chose to use 120 roll film size (Cut to size, and re-rolled onto spools) in a medium format Mamiya 645 "S", and a Mamiya C-3 camera - D-76-JK / Ansco-17-JK and Rodinal. The ratios of the working developers, and preparation before development:

> Preparation= AVIPHOT film MUST be Pre-Soaked in COLD water before any adding of developing agents. Pre-soaking in cold water for 1 to 2 minutes is highly recommended with this film. Reason is that it has a "anti-halation layer". (*I was very ill at ease when I first saw this, but after two or three rinses, the water came clear. So,, Do not be alarmed at the color you will see after the first rinse.*)

>**D-76-JK** (*my reformulation*) = Straight from the stock. Time= 8.5 Minutes.
>**Ansco-17-JK** (*my reformulation*) = Straight from the stock. Time= 20 Minutes.
>**Rodinal** = was a 1:50. Time= 10 Minutes, @ 20 C.. Water rinse as "stop", three times. Fixation was completed with (HYPO) sodium thiosulphate +acidic acid, and sodium sulfite.

All the developers where used at a temp. of 20 Centigrade. With normal agitations. (One full minute, gently, rotating in a "Paterson Tank", then rest for one full minute, and agitate 30 seconds thereafter.) As I do with any films with using these developers. I cut the exposed film into 8" sections, each section was developed with the different developers - (*I used three of the four cut sections, thus giving me 3 negatives for each*).

NOTE >

Because of AVIPHOT film is about ½ the thickness of other panchromatic films, it is a bit "flimsy", thus, it may be a little difficult to roll onto a Paterson spiral reel. For this reason, I advise to be careful with the advancing of the film onto the reel. AND - I do not think that a stainless steel reel would do at all. *(However... That is my belief, I never could get the film to go well onto these.*)

After the films were dry I scanned with an Epson 700 scanner, set to 2400 dpi. I let the scanner's software do its "thing" to invert the negatives into positives; with a blitheness set to medium, with no other "boxes" checked. I then brought them into Photoshop CS-5 for cropping and saving at 300 dpi. No other edits were made.

Examples on next page. (*One for each developer*.)

Developed in D-76-JK @ 20 C. For 8.5 minutes

Developed in Ansco-17-JK @ 20 C. For 20 minutes

Developed in Rodinal (1:50) @ 20 C. For 10 minutes

Not being very familiar with Rodinal development, I search the Web and read all that I found useful. (So should you.)

Looking at the examples in this article, does not show very much information. If anyone would wish to see these larger, please let me know in an e-mail.

Here are the formulas for experimenting photographs may try to use. When mixing any developer from a written formula, ***ALWAYS Add Each Chemical As Written In That Order. Wait Till Each Chemical Is Completely Dissolved BEFORE Adding Another***...

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D-76/JK...

Water.....750ml @130 Fahrenheit.
Metol..... 2.0 Grams
Sodium Sulfite.....100 - Grams
Hydroquinone..... 5.0 - Grams
Borax..... 2.0 - Grams

Add water to Fill to One Full Liter of Stock. Use as is. Development time is 8 - 10 minutes @ 20 Centigrade. (A ratio of 1:1 will take longer, up to 11 - 13 Minutes.) Use as a "One Shot" Developer.

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Ansco-17/JK...

Water.....750ml @ 130 Fahrenheit.
Metol.....1.5 Grams
Sodium Sulfite..... 80.0 - Grams
Hydroquinone..... 3.0 - Grams
Borax..... 3.0 - Grams
Potassium Bromide..... 0.5 - Gram

Add water to fill to One Full Liter of Stock. (This is a fine grain developer.)
It can be diluted as a 1:1, with development time of 30 to 35 minutes.
(*I usually use it as a "one shot" full strength developer. Then discard.*)

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Rodinal - I use "ADOX" Rodinal - The standard dilutions are plainly written on the label of the bottle. Use as a "One Shot" Developer. I used 1:50 @20 C.

As with any developing agent, Time, Ratios, Temps., and agitation are factors for best development. When using any manufactured developer, follow the instructions. If you are re-formulating your own from books like "The Darkroom Cookbook", by Steve Anchell, you are a bit on your own. However. You will get what you want with your photographic work.

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